

**Public Perceptions/Acceptance Working Group
Blue Ribbon Water Panel
Draft White Paper Analysis
August 26, 2010**

Issue #16

The need for the public, community leaders, water treatment professionals, businesses and industry to understand and be aware of water quality issues and how their actions, including disposal of pharmaceuticals and personal care products, can influence water quality

1. Existing Situation or Issue

Pharmaceuticals and personal care products in the water supply have received attention. Headlines such as *Millions in U.S. Drink Contaminated Water, Records Show*ⁱ and *Tap Water Is Legal but May Be Unhealthy*ⁱⁱ are alarming. Studies show that pharmaceuticals and personal care products are present in our waterways as pollutants.ⁱⁱⁱ But how do pharmaceuticals and personal care products get into our waterways and water supply? More importantly, what can be done to get them out of the water supply?

The public places a great deal of trust in water professionals to deliver water that is free of contaminants. Because water is a basic, life sustaining element, the public expects water to be clean, safe and contamination-free. Like many pollutants, prevention is more cost effective than treatment and removal.

EPA defines pharmaceuticals and personal care products as any product used by individuals for personal health or cosmetic reasons or used by agribusiness to enhance growth or health of livestock^{iv}. Pharmaceuticals and personal care products that are not fully absorbed by our bodies are excreted and passed on to the wastewater and surface water. They have been probably been in our water supply and environment for years, but advances in technology now allow us to detect and quantify traces of these chemicals. We are also beginning to identify what effects this chemicals have on human health and the environment.

- Current education approaches
- How the state is addressing
 - ADEQ brochure
- Role of Physicians and Pharmacists
- Role of other governmental entities
 - City of Tempe
 - City of Chandler
 - Pima County Dispose-a-Med
- Role of the public

2. Associated Impediments to Increased Reuse

- Water quality and water supply are closely interrelated.
- Poor quality water diminishes the amount of water available for potable use and for reuse
- Unknown effects cause the public to fear and distrust in the safety of reuse water.
- The public may not understand the water quality standard-setting process

3. Possible Solutions

- Raise Awareness
- Build Partnerships
 - Law enforcement
 - Academia/University Pharmacy College
 - Water treatment professionals
 - Pharmacies
- Community leadership advocating safe disposal
 - Physicians and Pharmacists
 - Elected officials
 - Federal, State and Local leaders
 - Water Treatment professionals
 - Business
- Public outreach
 - How water quality and water supply are linked
 - What you can do
- Highlight Successes
 - Town of Oro Valley Take Back Program

4. Recommendations

- Expand pharmaceutical take-back programs: participate at the state and national level as efforts to facilitate such programs become available
- Urge ADEQ to step up in this area with a non-regulatory outreach/ education/facilitation approach, which cuts through some of the barriers
- Explain how contaminants get regulated
- Be pro-active with the media
- Use experts, universities, professional industry organizations, subject matter experts and social media

5. Describe how the policy/rule/legislation or guidance could be administered (state, county, local, etc)

6. Benefits of the Recommendation

7. Possible Unintended Consequences of Recommendation

ⁱ <http://www.nytimes.com/2009/12/08/business/energy-environment/08water.html>

ⁱⁱ http://www.nytimes.com/2009/12/17/us/17water.html?_r=1

ⁱⁱⁱ <http://www.epa.gov/ppcp/work2.html>

^{iv} <http://www.epa.gov/ppcp/>